

CHARGE NUMBER: 1600
PROJECT TITLE: Smoker Psychology
PERIOD COVERED: April 1-30, 1980
PROJECT LEADER: W. L. Dunn
DATE OF REPORT: May 12, 1980

Project Title: Annual Monitoring of Cigarette Acceptability (Year 4)
Written by: F. J. Ryan

Ballots have been received from 2972 panelists, and coding will be completed by May 15. Results will be in the next monthly report.

Project Title: Salivation Response to Merit Regular, Merit Menthol, and Merit Regular Plus WS
Written by: F. J. Ryan

Excreted saliva before, during, and after smoking or dry-puffing these three cigarettes is being measured. Data are complete for 9 smokers, 5 more are being tested, and 2 more are sought. Data gathering should be completed this month.

Project Title: Nicotine Discrimination at Marlboro Delivery
Written by: F. J. Ryan

Testing has begun to see whether R&D smokers can discriminate between nicotine deliveries at Marlboro level. Twenty smokers will each make 20 comparisons. Seven have begun testing.

Project Title: Acceptability of Differential Nicotine Deliveries at 6 mg Tar
Written by: F. J. Ryan

The first test samples made proved too low in FTC tar, are being remade.

Project Title: Cigarette Firmness Discrimination
Written by: F. J. Ryan

In response to a request from Chris Irving, a series of tests of smoker response to cigarettes of different firmness is now being designed to help support Project 0307.

We are interested (1) in whether smokers can detect firmness differences in unlit and lit cigarettes, (2) in how their judgments compare to machine judgments, and (3) in how firmness affects acceptability ratings during smoking and snuffout.

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Project Title: Equipment
Written by: F. P. Gullotta

The Nova 4S was installed. Its current capabilities are those of the Nova 2 (as of 4/17).

Project Title: Spectral Analysis of EEG Data
Written by: F. P. Gullotta

S. Osborne has begun to devise a program to give power spectral density functions for EEG data. Several experiments await analysis.

Project Title: Auditory Evoked Potentials
Written by: F. P. Gullotta

We have previously demonstrated that cigarette smoking and abstention have no effect on auditory evoked potentials to pure tone stimulation. We are presently running a group of nonsmokers to ascertain whether their EPs can be differentiated from those of smokers.

Project Title: The Discriminative Stimulus Properties of ℓ -nicotine and Nicotine Analogues
Written by: V. J. DeNoble

A series of studies have begun that will evaluate the effectiveness of $d\ell$ -3 methylethylaminomethylpyridine, $d\ell$ -diethylaminomethylpyridine, 2-isonicotine and 4-isonicotine in producing nicotine-like interoceptive responses in rats. In addition we are collecting data to form dose response curves generated from injection of ℓ -nicotine and nicotine analogues.

Project Title: The Effects of Intraventricular Injections of ℓ -nicotine and Nicotine Analogues on Activity and Schedule-Controlled Behavior
Written by V. J. DeNoble

Intraventricular injections of ℓ -nicotine have been shown to produce a prostration syndrome that appears to be specific to nicotine-cholinergic activity. We are using two methods to investigate this phenomenon. (1) behavior rating scales and (2) operant behavior. The rating scale has proven successful to screen nicotine analogues for gross behavioral and central nervous system effects. The schedule-controlled behavior tests are in the baseline data collection phase.

Project Title: Self-Administration of ℓ -nicotine: the Effects of Fixed Ratio Size and Dose
Written by: V. J. DeNoble

At present the equipment is being set up for this project. It is expected that initial testing will begin with 30 days.

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Project Title: Unobtrusive Monitoring of Inhalation
Written by: J. A. Jones

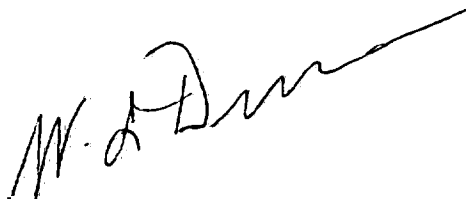
Five smokers have participated in a three-day pilot study examining alteration in inhalation pattern as a function of delivery of cigarette smoked. Immediately evident are the individual differences in inhalation patterns for a given cigarette. Some smokers demonstrate a deep inhalation followed by immediate exhalation, whereas other individuals tend to inhale a smaller volume but retain the smoke-laden inhalation for a period of seconds before exhaling. The MINC computer to be used in future studies will permit analysis of the parameters of inhalation volume, duration or retention time and, therefore, smoke exposure.

System accuracy following calibration continued to be very acceptable, on the order of .90 and above for a range of respiration volumes.

The mobile apparatus is en route to Philip Morris and should arrive within the next two weeks.

Project Title: Ultra-Low Delivery Smokers' Study
Written by: S. R. Dunn

A research proposal has been completed and should be available for dissemination shortly. The study will be focused on 45 year-old, white, female professionals. Data collection will be by a structured face to face interview method. The interview procedures are currently being tested and refined with in-house participants. Subject recruitment through the Virginia Panel is underway.



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